

REMARKS

Claims 1-37 are currently pending, wherein claims 1 and 30 have been amended to even more clearly define the present invention. Applicant respectfully requests favorable reconsideration in view of the remarks presented herein below.

In paragraph 3 of the Office Action ("Action"), the Examiner rejects claims 1-37 under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent No. 6,094,427 to Yi ("Yi") in view of U.S. Patent No. 6,477,163 to Miller ("Miller"). Applicant respectfully traverses this rejection.

In order to support a rejection under 35 U.S.C. § 103, the Examiner must establish a *prima facie* case of obviousness. To establish a *prima facie* case of obviousness, three criteria must be met. First, there must be some motivation to combine the cited references. Second, there must be a reasonable expectation of success. Finally, the combination must teach each and every claimed element. In the present case, claims 1-37 are not rendered unpatentable by the combination of Yi and Miller because the Examiner fails to establish a *prima facie* case of obviousness as discussed below.

Independent claim 1 defines a method of test receiving alternative reception frequencies in a receiver that receives a continuous flow of information of a digital broadcasting transmission at a first reception frequency, the continuous flow of information including user terminating information. The method includes, *inter alia*, predicting an interruption in the form of a natural break in the flow of specific user

terminating information; evaluating, based on the behavior of the specific user terminating information, the interruption to determine whether it will be of an adequate length of time and generating a positive response if it is evaluated to be of an adequate length of time; changing the reception frequency of the receiver from the first reception frequency to an alternative reception frequency; test receiving the alternative reception frequency; and enabling reception and extraction of the flow of specific user terminating information.

Yi discloses an apparatus and method that combines a constituent coding/encoding sequence such as turbo coding with a soft handoff operation, so that a receiver can receive two differently coded data streams based on the same information signal via two different base stations involved in the handoff operation. However, Yi fails to disclose the present invention. More specifically, nowhere in Yi is there any disclosure of *predicting* an interruption in the form of a natural break in the flow of the specific user terminating information, and evaluating, based on the behavior of the specific user terminating information, the interruption to determine whether it will be of an adequate length as claimed.

Miller discloses a radio transceiver including an alternate channel searching algorithm that reduces alternate channel search times. The algorithm determines the actual availability of alternate channels by receiving squitter messages on the alternate channels in a non-assigned time slot. The alternate channels are ranked according to signal-to-noise ratios and displayed for selection by an operator.

In rejecting claim 1, the Examiner asserts that Yi discloses determining an interruption and scanning various frequencies to switch to an alternative frequency, but fails to disclose or suggest predicting an interruption in the flow of specific user terminating information. Therefore, the Examiner relies on Miller to overcome the deficiencies of Yi. More specifically, the Examiner asserts that Miller discloses a radio transceiver which predicts an interruption in the flow of specific transceiver terminating information and searches for availability of alternate channels. Furthermore, the Examiner concludes that it would have been obvious to one skilled in the art to incorporate the "teachings of Miller into the system of Yi [to] quickly determine in advance [the] actual availability of other channels to enable the transceiver to quickly switch to an alternate channel."

First, the Examiner's assertion regarding the teachings of Miller is misleading. Although Miller may implicitly disclose predicting an interruption in the flow of specific transceiver terminating information inasmuch as Miller discloses that information is transmitted on negotiated time slots on a main channel, nowhere in Miller is there any explicit disclosure of predicting an interruption in the flow of specific user terminating information and evaluating the interruption to determine whether it will be of an adequate length as claimed. To the contrary, Miller merely discloses switching channels to receive squitter messages during unassigned time slots. Accordingly, there is no need in the system of Miller to determine if a predicted "interruption" will be of an adequate length because the negotiated/assigned time slots are a known length.

Second, Yi's combined turbo coding and soft handoff method is based on a CDMA transmission system whereas Miller's alternate channel algorithm is based on a TDMA system. Accordingly, one skilled in the art would not have been motivated to combine Miller's TDMA algorithm with Yi's CDMA handoff method. Nor has the Examiner provided any evidence that the TDMA algorithm of Miller is compatible with the CDMA handoff of Yi.

Finally, even if one skilled in the art were able to combine the teachings of Yi and Miller, the combination would still fail to render claim 1 unpatentable because the combination fails to disclose each and every claimed element. Nowhere in Yi or Miller is there any disclosure or suggestion of predicting an interruption in the form of a natural break in the flow of specific user terminating information and evaluating, based on the behavior of the specific user terminating information, the interruption to determine whether it will be of an adequate length of time as claimed.

Independent claim 30 defines a receiver configured to receive a continuous flow of information, including user terminating information, at a first reception frequency. The receiver includes, *inter alia*, an antenna, a demodulator, and a digital signal processing unit configured to carry out the method of claim 1. Therefore, independent claim 30 is patentable over the combination of Yi and Miller for at least those reasons presented above with respect to claim 1.

Claims 2 and 3 depend from independent claim 1. These claims, in addition to the elements of claim 1, further define that the continuous flow of information is a

terrestrial digital video broadcasting transmission (claim 2) or a digital audio broadcasting transmission (claim 3). Accordingly, these claims are patentable over the combination of Yi and Miller, not only for those reasons presented above with respect to claim 1, but also because the combination fails to disclose or suggest that the transmission is a DVB-T or DAB transmission.

In rejecting claims 2 and 3, the Examiner asserts that Yi discloses receiving a DVB-T or DAB transmission inasmuch as Yi discloses that "the wireless communications can carry any digital data, including voice, image, video, text file, or multimedia information." This assertion is unfounded.

The mere disclosure of the "type" of data being transmitted is not equivalent to disclose a specific transmission protocol. Claims 2 and 3 recite that the transmission is DVB-T or DAB transmission. One skilled in the art would readily appreciate that Yi's disclosure of the type of data being transmitted is not equivalent to disclosing how it is transmitted. Accordingly, claims 2 and 3 are patentable over the combination of Yi and Miller for at least the reason that the combination fails to disclose each and every claimed element.


Claims 4-29 and 31-37 variously depend from independent claims 1 and 30. Therefore, claims 4-29 and 31-37 are patentable over Yi for at least those reasons presented above with respect to claims 1 and 30. Accordingly, Applicant respectfully requests reconsideration and withdrawal of the rejection of claims 1-37 under 35 U.S.C. § 103(a).

The application is in condition for allowance. Notice of same is earnestly solicited. Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Penny Caudle (Reg. No. 46,607) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

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Respectfully submitted,

By 

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